

Amendments to the Drawings:

The attached replacement drawing sheets make changes to Figs. 5 and 7 and replace the original sheets with Figs. 5 and 7.

Attachment: Replacement Sheets

REMARKS

Claims 1-23 are pending in this application. By this Amendment, the specification, drawings and claims 1, 13, 14, 15, 18, 20 and 22 are amended. Reconsideration of the application is respectfully requested.

The courtesies extended to Applicants' representative by Examiners Thomas and Vu during the February 15, 2006 personal interview are gratefully appreciated. The reasons presented at the interview as warranting favorable action are incorporated into the remarks below and constitute Applicants' record of the interview.

The Office Action objects to the drawings. The drawings and the specification are amended to overcome the objection by adding the recitation "black" in Fig. 7, identifying element 130 in Fig. 5, and removing the recitation of electrode 200 and elements 200 and 250 from the specification. Accordingly, withdrawal of the objection to the drawings is respectfully requested.

The Office Action objects to claims 1, 7, 14, 15, 20 and 22 because of informalities. The claims are amended to overcome the informalities. Moreover, as agreed during the personal interview, support for the reduction in the shielding effect can be found in the specification at, for example, page 4, lines 10-20. Accordingly, withdrawal of the objection to the claims is respectfully requested.

The Office Action rejects claims 1-6, 8-12 and 18-23 under the judicially created doctrine of obviousness-type double patenting over claims 1-27 of U.S. Patent No. 6,909,867. Although Applicants disagree with the rejection, a Terminal Disclaimer is filed to obviate the obviousness-type double patenting rejection. Accordingly, withdrawal of the rejection of the claims for obviousness-type double patenting is respectfully requested.

The Office Action rejects claim 1 under 35 U.S.C. §102(b) over Mishra et al. (U.S. Patent No. 5,300,986); claims 13-18, 22 and 23 under 35 U.S.C. §102(b) over Walsh et al. ("The Negative Corona Distribution for a Long Thin Pin-to Plane Geometry"); claims 2 and 3 under 35 U.S.C. §103(a) over Mishra in view of Crosky et al. (U.S. Patent No. 2,890,388); claims 5 and 6 under 35 U.S.C. §103(a) over Mishra in view of Crosky and Darty (U.S. Patent No. 6,899,854); and claims 8-11 under 35 U.S.C. §103(a) over Mishra in view of Crosky and Yonekawa et al. (U.S. Patent No. 6,208,499). The rejections are respectfully traversed.

As agreed during the personal interview, Mishra fails to disclose or suggest a corona producing device that includes a plurality of corona producing elements arranged in a profile that reduces shielding effects, as recited in independent claim 1. Thus, Mishra fails to disclose or suggest each and every feature of independent claim 1. As such, independent claim 1, and its dependent claims, are patentable over Mishra.

As discussed during the personal interview, Walsh fails to disclose or suggest a corona producing element profile determination method and a method of substantially uniformly charging a charge retentive surface that includes determining an electrical credential in space between a charging device and surface and adjusting a profile of the corona producing elements, as recited in independent claim 13, and similarly recited in independent claim 18. As discussed during the personal interview, Walsh fails to disclose or suggest using the mathematical equations in order to reduce the shielding effect between various corona producing elements. Thus, Walsh fails to disclose or suggest each and every feature of independent claims 13 and 18. Accordingly, independent claims 13 and 18, and their dependent claims, are patentable over Walsh.

For at least these reasons, independent claims 1, 13 and 18, and their dependent claims, are patentable over Mishra and Walsh. Thus, withdrawal of the rejections of the claims under 35 U.S.C. §102(b) is respectfully requested.

Crosky teaches an electrostatic charging apparatus for charging particles of coating material wherein the particles of coating material are projected in atomized form from a spray gun (col. 1, lines 15-20).

Darty teaches an image forming apparatus usable with colorant and media that includes a colorant applicator and a nanotube assembly that emits electron beams to selectively charge the colorant on the colorant applicator (Abstract).

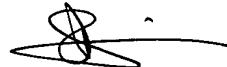
Yonekawa teaches a corona discharge device used in an electrophotographic image forming apparatus that includes a discharge member such as a saw-toothed discharge member having sharp discharge ends (Abstract).

However, none of these references cures deficiencies in Mishra in disclosing or rendering obvious the features of dependent claims 2, 3, 5, 6 and 8-11, including the limitations of independent claim 1. Thus, independent claim 1, and its dependent claims, are patentable over a combination of the applied references. As such, withdrawal of the rejection of the claims under 35 U.S.C. §103(a) is respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-20 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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JAO:TMN/amw

Attachments:

Replacement Sheets
Terminal Disclaimer

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